

REMARKS

This Reply is in response to the Office Action mailed on September 26, 2005 in which Claims 1-31 were rejected. With this response, Claims 2 and 25 are cancelled; Claims 1, 12 and 14 are amended; and Claims 32-34 are added. Claims 1, 3-24 and 26-34 are presented for reconsideration and allowance.

I. Amendments to the Specification.

During the review of the application, a few typographical errors were noted in the specification. Paragraph [0021] of the application is amended to correct such typographical errors. No new matter is believed to have been added.

II. Rejection of Claims 1, 3, 7-11, 14-19, 21 and 26-31 Under 35 U.S.C. § 102(b) Based Upon Hartkemeyer.

Paragraph 3 of the Office Action rejected Claims 1, 3, 7-11, 14-19, 21 and 26-31 under 35 U.S.C. § 102(b) as being anticipated by Hartkemeyer, U.S. Patent No. 4,684,562. Claims 1, 3, 7-11, 14-19, 21 and 26-31, as amended, overcome the rejection based upon Hartkemeyer.

A. Claim 1.

With this response, Claim 1 is amended to incorporate the limitations of Claim 2 which has been cancelled. Claim 1, as amended, recites the floor underlayment including a first layer including cork material, a second coupled to the first layer having a high degree of resistance to moisture permeability and a third layer coupled to the first layer opposite the second layer, the third layer having a high degree of resistance to moisture permeability.

Neither Hartkemeyer nor the prior art of record, alone or in combination, disclose or suggest a floor underlayment having a first layer including cork material, a second layer coupled to the first layer having a high degree of resistance to moisture permeability and a third layer coupled to the first opposite the second layer and having a high degree of resistance to moisture permeability. As acknowledged in the Office Action with respect to Claim 2, the limitations of which have now been incorporated into Claim 1, Hartkemeyer

does not teach the third layer having a high resistance of moisture permeability. As a result, the Office Action attempted to additionally rely upon Thiers, U.S. Patent No. 6,786,019, for its teaching of an impermeable and moisture proof wood flooring. The Office Action further went onto to assert that:

It would have been obvious to one of ordinary skill in the art to included the impermeable column moisture proof wood top layer, as taught by Thiers, in the top layer of the flooring system of Hartkemeyer because the moisture proof material provides protection for the floor from outside elements and from being ruined by mildew buildup.

However, in contrast to the assertion made in the Office Action, no teaching or suggestion exists for adding the impermeable, moisture proof wood top layer of Thiers to the mat of Hartkemeyer. Nowhere does Hartkemeyer suggest any benefit or advantage to additionally adding an impermeable, moisture proof wood top layer above its mat. In fact, Hartkemeyer specifically teaches away from such a modification. Hartkemeyer repeatedly requires that the top layer 1 be liquid absorbent and permeable.

In rejecting Claim 1, the Office Action stated that:

Hartkemeyer further discloses the top layer can be formed of any material (col. 3, lines 5-7).

However, the Office Action overlooks that the end of the same sentence that specifically states that the top layer can be any material “that is liquid absorbent and permeable.” (See col. 3, lines 5-7). The purpose of top layer 1 is to absorb drippings and conduct them isotrophically to the intermediate layer of cork. (See col. 2, lines 20-22). In fact, the purpose for the entire mat itself is to absorb drippings from vehicles or other objects upon the flooring using the cork. (See col. 2, lines 5-7; col. 3, lines 45-52; col. 3, lines 54-57).

Not only does Hartkemeyer teach away from adding an impermeable moisture proof wood top layer, doing so would destroy the intended operation or functioning of the mat of Hartkemeyer in that it would prevent the cork layer from absorbing drippings. Because it is well settled law that the proposed modification cannot render the prior art unsatisfactory for its intended purpose and that the proposed modification cannot change the principle of operation of a reference (see MPEP 2143.01), it would not be obvious to modify the mat of

Hartkemeyer to include the impermeable moisture proof wood top layer of Thiers as asserted by the Office Action with respect to former Claim 2. Accordingly, Claim 1, as amended to incorporate the limitations of the Claim 2, overcomes the rejection based upon Hartkemeyer and is further patentably distinct over the prior art of record additionally including Thiers. Claims 3 and 7-11 depend from Claim 1 and overcome the rejection for the same reasons.

B. Claim 4.

Claim 4 depends from Claim 3 which recites that the first layer, the second layer and the third layer are formed as part of a sheet. Claim 4 additionally recites that the sheet is sufficiently flexible to be rolled.

Hartkemeyer fails to disclose or suggest that its mat for absorbing oil and other liquids is sufficiently flexible to be rolled. In fact, because Hartkemeyer discloses that the top layer generally formed from cardboard, the mat of Hartkemeyer would not appear to be sufficiently flexible so as to be rolled. Moreover, adding the wood and floor covering of Thiers would clearly prevent the mat of Hartkemeyer from being sufficiently flexible so as to be rolled. Thus, Claim 4 overcomes the rejection for this additional reason.

C. Claim 7.

Claim 7 depends from Claim 1 and further recites that the first layer and the third layer are formed from a common material.

Neither Hartkemeyer nor the prior art of record fails to disclose or suggest a first layer and third layer on opposite sides of a first layer including cork material, wherein the first layer and the third layer are formed from the same or common material. In contrast, Hartkemeyer discloses that layer 5 comprises a foam material such as polyisocyanurate having a floor material 7 on its underside. Hartkemeyer discloses that layer 1 is formed from cardboard. Layer 1 is specifically required to be liquid absorbent and permeable. In contrast, layer 5 is required to be resistant to liquid. It is clear that layers 1 and 5 of Hartkemeyer cannot be formed from the same or a common material. Thus, the rejection of Claim 7 is improper and should be withdrawn.

D. Claim 14.

With this response, Claim 14 is amended to incorporate the limitations of dependent Claim 25 which is canceled. Claim 14 recites a flooring system which includes a concrete subfloor, a floor underlayment and a flooring including wood material above the floor underlayment. The floor underlayment includes a first layer including cork material and a second layer attached to the first layer, wherein the second layer is highly resistant to moisture permeability and is between the first layer and the subfloor.

Neither Hartkemeyer, Thiers nor the prior art of record disclose or suggest a flooring system having a floor underlayment between a concrete subfloor and a wood flooring, wherein the underlayment includes a layer of cork material and a layer highly resistant to moisture permeability attached to the layer of cork material between the layer of cork material and the subfloor. With respect to Claim 25, the limitations of which have been incorporated into Claim 14, the Office Action acknowledges that Hartkemeyer alone fails to disclose a wood flooring above the underlayment. As a result, the Office Action attempted to additionally rely upon Thiers, U.S. Patent No. 6,786,019, for disclosing an impermeable, moisture proof wood top layer.

However, neither Hartkemeyer nor Thiers provide any motivation or suggestion for additionally providing Hartkemeyer with a wood material flooring above the mat of Hartkemeyer. As noted above with respect to the rejection of Claim 1, Hartkemeyer specifically teaches away from such a modification in that the main purpose of Hartkemeyer is to catch and absorb drippings with the layer of cork material. To additionally provide the impermeable, moisture proof wood top layer of Thiers over the mat of Hartkemeyer would prevent the mat of Hartkemeyer from performing its intended function, catching and absorbing drippings. Because such a modification would destroy the intended functioning and the principle operation of the mat of Hartkemeyer, it would not be obvious to one of ordinary skill in the art to modify Hartkemeyer to additionally include the floor covering of Thiers. Thus, Claim 14, as amended to incorporate the limitations of Claim 25, overcomes the rejection based upon Hartkemeyer. Claim 14 is further believed to be patentably distinct over Hartkemeyer and the prior art of record, including Thiers.

III. Rejection of Claims 5-6, 12-13 and 23-24 Under 35 U.S.C. § 103 Based Upon Hartkemeyer.

Paragraph 5 of the Office Action rejected Claims 5-6, 12-13 and 23-24 under 35 U.S.C. § 103(a) as being unpatentable over Hartkemeyer, U.S. Patent No. 4,684,562. Claims 5-6 and 12-13 and Claims 23-24 depend Claims 1 and 14, respectively, and overcome the rejection based upon Hartkemeyer for the same reasons discussed above with respect to Claims 1 and 14. Claims 6, 13 and 24 overcome the rejection based upon Hartkemeyer for the additional reasons which follow.

Claim 6 depends from Claim 1 and recites that the second layer and the third layer each have a thickness of less than about 5 mils. Claim 13 depends from Claim 1 and recites that at least one of the second layer and the third layer have thickness of no greater than about 3 mils. Claim 24 ultimately depends from Claim 14 and recites that the second layer and the third layer each have a thickness of less than about 5 mils.

As acknowledged by the Office Action, Hartkemeyer does not explicitly disclose the thickness of its layers. As a result, the Office Action attempts to assert that the recited thickness would simply be the result of mere routine experimentation.

However, recited thickness are not merely a matter of design choice and would not result from “routine experimentation.” As set forth in the specification, layer 20 has a thickness sufficiently thin so as to minimize the wall thickness of underlayment 14 so as to provide underlayment 14 with sufficient pliability and flexibility such that underlayment 14 may be formed in sheets which are rolled without damage to underlayment 14. The specification further goes on to state that “like layer 20, layer 22 preferably has a maximum thickness which is thin enough to permit underlayment 14 to be formed in sheets and rolled without damage to underlayment 14. Thus, the recited thickness is not a matter of design choice or the result of routine experimentation. Nowhere does Hartkemeyer disclose or suggest that its mat should be provided with a thickness enabling the mat to be rolled. Nowhere does Hartkemeyer disclose or suggest that such recited maximum thicknesses would be inherent to the mat of Hartkemeyer. In fact, because Hartkemeyer specifically discloses that layer 5 should be formed from a foam material, it is highly unlikely that layer 5

would have the recited maximum thickness. Accordingly, Claims 6, 13 and 24 overcome the rejection based upon Hartkemeyer under 35 U.S.C. § 103 for this additional reason.

IV. Rejection of Claims 2, 20 and 25 Under 35 U.S.C. § 103 Based Upon Hartkemeyer and Thiers.

Paragraph 7 of the Office Action rejected Claims 2, 20 and 25 under 35 U.S.C. § 103(a) as being unpatentable over Hartkemeyer, U.S. Patent No. 4,684,562, in view of Thiers, U.S. Patent No. 6,786,019. With this response, Claims 2 and 25 are cancelled with their limitations incorporated into Claims 1 and 14, respectively. As discussed above, Claims 1 and 14 are patentably distinct over Hartkemeyer in view of Thiers. Claim 20 depends from Claim 14 and is patentably distinct over Hartkemeyer and Thiers for the following additional reason.

Claim 20 is directed to the flooring system of Claim 14 wherein a floor underlayment is positioned between a concrete subfloor and a flooring including wood material. The underlayment includes three layers: a first layer including cork material, a second layer attached to the first layer and being highly resistant to moisture permeability and a third layer coupled to the first layer opposite the second layer and being highly resistant to moisture permeability.

Neither Hartkemeyer nor Thiers, alone or in combination, disclose or suggest an underlayment positioned between the concrete subfloor and a wood flooring, wherein the underlayment includes a layer of cork material sandwiched between layers that are highly resistant to moisture permeability. Once again, as noted above with respect to Claims 1 and 14, the mat of Hartkemeyer specifically requires that its mat have a top layer 1 that is liquid absorbent and permeable. (See col. 3, lines 6-8). As noted above, it would not be obvious to provide the floor covering of Thiers over the mat of Hartkemeyer in that it would destroy the intended function and principle operation of the mat of Hartkemeyer by preventing the mat of Hartkemeyer from catching and absorbing drippings. Moreover, even assuming, arguendo, that it were obvious to provide the floor covering of Thiers over the mat of Hartkemeyer, the resulting hypothetical combination would still fail to disclose an underlayment between a concrete subfloor and a wood flooring, wherein the underlayment includes a layer of cork

material sandwiched between two moisture impermeable layers. The floor covering of Thiers cannot be considered to constitute both the wood flooring and the third moisture impermeable layer. Accordingly, Claim 20 overcomes the rejection based upon Hartkemeyer and Thiers for this additional reason.

V. Added Claims.

With this response, Claims 32-34 are added. Claims 32-34 are believed to be patentably distinct over the prior art of record and are presented for consideration and allowance.

A. Claims 32 and 33.

Added Claim 32 constitutes former Claim 4 rewritten in independent form including the limitations of former base Claim 1 and former intervening Claim 3. Added Claim 32 recites a floor underlayment which includes a first layer including a cork material, a second layer coupled to the first layer and having a high degree of resistance to moisture permeability and a third layer coupled to the first layer opposite the second layer, the third layer configured to be formed from at least one material to enhance the dimensional stability of the first layer. Claim 32 further recites that the first layer, the second layer and the third layer are formed as part of a sheet that is sufficiently flexible to be rolled.

The prior art of record fails to disclose or suggest a floor underlayment including a middle layer of cork material sandwiched between two opposite layers, wherein the three layers are formed as a sheet that is sufficiently flexible to be rolled. The Office Action failed to address the limitation recited in original Claim 4. Moreover, Hartkemeyer fails to disclose a mat that is sufficiently flexible to be rolled. In contrast, Hartkemeyer discloses a mat having a top layer formed from cardboard which would seemingly not be rollable. Thiers discloses a rigid wood floor covering. Thus, Claim 32 is presented for consideration and allowance.

Claim 33 depends from Claim 32 and further recites that the second and third layers have a thickness of less than about 5 mils. As noted in the specification, this recited

thickness provides a sheet with sufficient flexibility to be rolled. Thus, Claim 33 is also presented for consideration and allowance.

B. Claim 34.

Added Claim 34 constitutes former Claim 20 rewritten in independent form to include all of the limitations of former base Claim 14 and former intervening Claim 17. Claim 34 recites a flooring system which includes an underlayment between a concrete subfloor and a flooring. The floor underlayment includes a layer of cork material between opposite layers that are both highly resistant to moisture permeability. The moisture impermeable layers are attached or coupled to the intermediate layer of cork material.

Neither Hartkemeyer, Thiers nor the prior art of record disclose or suggest such a flooring system. As noted above, the mat of Hartkemeyer does not include a layer of cork material attached or coupled to and located between opposite layers of material that are highly resistant to moisture permeability. As noted above, Hartkemeyer specifically teaches away from the positioning of intermediate layer 3 of cork material between opposite layers of material that are resistant to moisture permeability. Hartkemeyer specifically requires that top layer 1 be liquid absorbent and permeable. Moreover, to replace top layer 1 with a layer of material highly resistant to moisture permeability would destroy the intended functioning and principle of operation of the mat of Hartkemeyer. Accordingly, added Claim 34 is presented for consideration and allowance.

VI. Conclusion.

After amending the claims as set forth above, claims 1, 3-24 and 26-34 are now pending in this application.

Applicant believes that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 06-1447. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 06-1447. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 06-1447.

Respectfully submitted,

Date

Dec. 27, 2005

By

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